



Launch Mission Execution Forecast

Mission: Atlas V CST-100 OFT-2

Issued: 1 Aug 2021 / 0900L (1300Z)

Valid: 3 Aug 2021 / 1310 – 1330L (1710 – 1730Z)



Forecast Discussion: A 24-hour delay forecast has been added with this update. Southwest steering flow is expected through late week, which typically favors the eastern half of the peninsula for afternoon showers and thunderstorms. While storms will remain isolated and delayed again today, precipitation chances are expected to increase Monday as a mid- and upper-level trough develops over the southeastern U.S. and drives a front as far south as Georgia. Given the pattern on Tuesday and Wednesday, the greatest coverage of convection is expected to hold off until after the launch window; however, a weather-related violation is still possible due to activity pushing onshore from the eastern Gulf of Mexico each morning. The primary concerns at this time, particularly toward the end of each count, are the Cumulus Cloud and Lightning Rules. Cloud cover streaming over the state from storms over the eastern Gulf of Mexico will bring an added concern for a Thick Cloud Layer Rule violation.

Launch Day	Probability of Violating Weather Constraints					
	40%	Primary Concerns: Cumulus Cloud Rule, Lightning Rule, Thick Cloud Layer Rule				
	Weather Conditions					Additional Risk Criteria
	Weather/Visibility:	Isolated Storms / 7 mi.	Clouds			
	Temp/Humidity:	87°F / 72%	Type	Coverage	Base (ft)	Tops (ft)
24-Hour Delay	Ground Winds (230'):	190° 15 - 19 knots	Cumulus	Scattered	3,000	10,000
			Cirrus	Broken	22,000	28,000
	Solar Activity: Low					
	Probability of Violating Weather Constraints					
	40%	Primary Concerns: Cumulus Cloud Rule, Lightning Rule, Thick Cloud Layer Rule				
	Weather Conditions					Additional Risk Criteria
	Weather/Visibility:	Isolated Storms / 7 mi.	Clouds			
	Temp/Humidity:	85°F / 76%	Type	Coverage	Base (ft)	Tops (ft)
	Ground Winds (230'):	190° 14 - 18 knots	Cumulus	Scattered	3,000	10,000
			Cirrus	Broken	18,000	22,000
	Solar Activity: Low					
	Note: The Probability of Violation (POV) is the chance that a Lightning Launch Commit Criteria (LLCC) or certain user constraints (surface winds, precipitation, and temperatures, etc.) will be violated during the launch window. It does not take into account upper-level wind shear and solar activity.					
	Next Forecast Will Be Issued 2 Aug 2021					